

PROCEEDINGS
OF THE
BIOLOGICAL SOCIETY OF WASHINGTON

CRITICAL NOTES ON THE CRACIDAE

BY W. E. CLYDE TODD.

The neotropical family Cracidae, comprising the Curassows and Guans, is represented in the collection of the Carnegie Museum by 373 specimens. These are included in 8 genera, 34 species, and 13 additional subspecies. A study of this material has resulted in the discovery of four forms which seem to be new, and are described herewith; certain other forms are the subject of critical remarks. The present paper is the eighteenth of the series to appear in these Proceedings, and is governed by the same rules as to measurements, names of colors, etc., as the others. Acknowledgments are due Mr. John T. Zimmer of the American Museum of Natural History for the loan of specimens for comparison, and to the late Mr. Outram Bangs for his courteous permission to examine the series of this group in the Museum of Comparative Zoölogy. Also, I am greatly indebted to Dr. Erwin Stresemann of Berlin, Germany, for comparing a specimen sent to him for that purpose.

Crax alector and *Crax globicera* Linnaeus.

The names for both of these well-known species go back to Linnaeus, 1766, and have been widely adopted. *Crax* has also been cited as of this date by nearly all recent authors. This procedure was of course perfectly proper so long as the twelfth edition of Linnaeus' work was accepted as the starting-point for binomial nomenclature. But now that the tenth edition has come to be taken instead certain changes are indicated. In this earlier edition *Crax* appears on page 157, with but two species included, *C. nigra* and *C. rubra*. The first name is based solely on several other authors; the second on a brief diagnosis ("capite caerulescente") and on Albin. Unfortunately neither of these names rests on as sound a base as those of the 1766 edition; nevertheless, making due allowance for the faulty descriptions of these early authors and the probabilities in either case we are perhaps justified in assigning *nigra* to the species renamed *alector* in

1766, and *rubra* to the *globera* of the same date. If we consider both earlier names unidentifiable then *Craz* itself becomes untenable as the name for the genus, since Chubb has designated *C. nigra* as the type (Birds British Guiana, I, 1916, 17).

Craz annulata Todd.

Mr. James L. Peters (MS.) places this name in the synonymy of *C. alberti* without any misgivings, stating that the type (which he has examined) is an immature male, and not a female as supposed and described. He must have overlooked the fact that there is also a male specimen, taken at the same time and place, whose sex is undoubted, and that this example differs from the same sex of *alberti* in a corresponding way. Therefore, I am not convinced that his conclusion is correct. The obvious smaller size and different coloration of both sexes seem to me to be good characters. If the type is an immature male, then what shall we call the other bird of this pair? The relative perfection of the crest-feathers in both specimens argues against the view that they are immature. At the same time it must be admitted that we know so little about the plumage changes in the Curassows from youth to maturity that such a possibility should be kept in mind. In my opinion *C. annulata* is a valid form, showing affinity with the Brazilian *C. globulosa*. Incidentally I may add that neither can I follow Mr. Peters in considering *C. daubentoni* and *C. alberti* conspecific: the females are entirely too unlike.

Mitu tomentosa (Spix).

In coloration this species is so close to the type of the genus (*M. mitu*) that its relationship thereto is undoubted. But in structural characters, as expressed in the shape of the bill and in the character of the crest, it is so different as perhaps to merit generic separation. It lacks any sign of the elevated and enlarged culmen which in *mitu* is so conspicuous, nor is there any depressed crest of broad, flat feathers, but merely a slight elongation of the ordinary feathers along the median line of the crown. In short, in these respects it differs as much from *mitu* as does the latter from *Pauxi*. *Mitu salvini*, however, has a bill intermediate between that of *mitu* and *tomentosa*.

Penelope purpurascens æquatorialis Salvadori and Festa.

Very recently Messrs. Hellmayr and Conover (Auk, XLIX, 1932, 333) have undertaken to discriminate the birds of this species from western Venezuela, the Santa Marta region and the Magdalena Valley of Colombia under the name *brunnescens*. I had already expressed my findings in this case (cf. Annals Carnegie Museum, XIV, 1922, 174). I have therefore again gone over our series with some care, and find myself unable to verify any of the characters which they assign.

Penelope argyrotis olivaceiceps, subsp. nov.

Type, No. 106,668, Collection Carnegie Museum, adult male; San Rafael (near Cumanacoa), 2950 feet, Sucre, Venezuela, November 17, 1929; Harold J. Clement.

Subspecific characters.—Similar to *Penelope argyrotis argyrotis* (Bonaparte) of northern Venezuela, etc., but feathers of the crest much darker and less brownish, olivaceous black (1) instead of raw umber.

Range.—Subtropical and Upper Tropical Zones of the eastern part of the coast range of northern Venezuela.

Remarks.—With a single immature bird before him, Dr. Chapman (American Museum Novitates, No. 191, 1925, 6) thought that birds of this species from this region might be racially distinct. Our series of six specimens (shot in November, and in fresh plumage) bear out his suspicions, but the characters he mentions are not the ones that validate the new race. The color of the crest, however, is sufficiently diagnostic, even without other characters.

***Penelope jacquacu orienticola*, subsp. nov.**

Type, No. 98,285, Collection Carnegie Museum, adult male; Manacapurú, Rio Solimões, Brazil, October 5, 1923; Samuel M. Klages.

Subspecific characters.—Similar to *Penelope jacquacu jacquacu* Spix (as represented by a specimen from the Rio Purús), but larger; general coloration of upper parts with much less rufescent wash posteriorly, the breast deeper greenish blue. Wing, 323; tail, 325; bill, 32; tarsus, 81.

Range.—Known at present only from the type-locality, but probably occupying an extensive area north of the Amazon and east of the Rio Negro in Brazil.

Remarks.—The single specimen here recorded represents a considerable eastward extension of the range of this species, and it is not surprising to find that it belongs to a different and undescribed form. The upper parts in the new race are dusky olive green, with a strong metallic sheen, but entirely lacking the brownish tinge so well developed and prominent in typical *jacquacu*. There is less grayish edging to the crest-feathers, while the posterior under parts, instead of being almost "solid" rufescent brown, have merely a little mottling of this color on a dark brown background. Our bird is still more distinct from *P. granti* of Roraima, with which it has been directly compared. The latter is much darker above and on the tail, with a decided bluish sheen, while the crest-feathers are longer, and the primaries are grayish brown, in decided contrast with the rest of the wings I should regard it as a distinct species.

***Ortalis guttata subaffinis*, subsp. nov.**

Type, No. 50,619, Collection Carnegie Museum, adult male; Buenavista, Bolivia, July 6, 1914; José Steinbach.

Subspecific characters.—Similar to *Ortalis guttata guttata* (Spix) of western Brazil, etc., but general color of the upper parts paler, averaging more olivaceous, less brownish, and pileum and hindneck decidedly paler, more grayish, less sooty.

Range.—Tropical Zone of eastern Bolivia.

Remarks.—Ogilvie-Grant (Catalogue Birds British Museum, XXII, 1893, 510) remarks that Bolivian skins of this species seem to be different.

The characters to which he calls attention, however, do not hold in our series, the real differences involving the general color of the upper parts and particularly of the head and neck, which stand out well upon comparison of a series. Compared with four specimens of *Ortalis guttata adspersa* from Boca Rio Urubamba, Peru, loaned by the American Museum of Natural History, the present form appears to be much closer to this than to true *guttata*. It averages a little larger, however, with noticeably heavier feet; the grayish white markings of the lower throat and breast are less sharply defined, and more in the form of scaly edgings than spots; and the chestnut area on the outer rectrices is less in extent, rarely invading the fourth pair. Otherwise it is the same. Measurements of the type: wing, 211; tail, 234; bill, 24; tarsus, 54.

Ortalis motmot ruficeps (Wagler).

Subspecific characters.—Similar to *Ortalis motmot motmot* (Linnaeus) of Venezuela, Guiana, and northern Brazil, but decidedly smaller; rufous of head and neck brighter (chestnut rather than bay); and outer rectrices averaging paler, less rufescent, as seen from below.

Remarks.—South of the Amazon *Ortalis motmot* appears to have been recorded only from Santarem (cf. Riker and Chapman, Auk, VIII, 1891, 162). An earlier record from the same place by Allen (Bulletin Essex Institute, VIII, 1876, 82), under the name *Ortalida ruficeps*, belongs here also, as I have recently satisfied myself by an examination of the specimen in question. It is not surprising, in view of the many analogous cases now known, to find that this species also undergoes a racial change upon crossing the great river. Our series of nine specimens from this part of its range are readily recognizable from true *motmot* by their markedly smaller size and by the uniformly more brightly colored rufous tone of the head and neck. The tail, too, is rather paler, and the outermost pair of rectrices have their outer webs more or less bronzy olive at the base, instead of uniform chestnut, as in the typical race.

The identity of the *Penelope ruficeps* of Wagler (Isis, 1830, 1111), said to be from Brazil, has been a matter of conjecture. So far as I can find it has been known only from the type in the Berlin Museum. This was examined by Sclater many years ago, and pronounced a good species. The description seemed to indicate a bird with much more bronzy olive on the outer rectrices than our series from the Rio Tapajóz. A direct comparison was deemed so desirable that I sent one of our specimens to Dr. Erwin Stresemann for this purpose. In reply he writes:

"The type of *Penelope ruficeps* Wagler was collected in the State of Pará by Franz Wilhelm Sieber about 1809 (see Journal für Ornithologie, 1922, 499). The exact locality is unknown, but it may have been the country around Cameté on the lower Rio Tapajóz. Compared with your specimen from Santarem, which I return to-day, the head and neck are much less rufescent, more dull brownish, but otherwise I see no difference. The rectrices are similarly colored in both. The type had been exposed to daylight for nearly 80 years."

This should suffice to fix the name on the bird above characterized. It is of course only a race of *O. motmot*. Six males of the latter measure: wing, 204–220; tail, 250–262; bill, 24–29; tarsus, 58–66. Eight males of *ruficeps*: wing, 175–190; tail, 186–208; bill, 22–24; tarsus, 48–51. That the present form has a much more extensive range than the Rip Tapajóz is indicated by our single specimen from Conceição do Araguaia, in the State of Pará.

Pipile cumanensis naumburgae, subsp. nov.

Type, No. 93,646, Collection Carnegie Museum, adult male; Arimã, Rio Purús, Brazil, October 11, 1922; Samuel M. Klages.

Subspecific characters.—Similar to *Pipile cumanensis cumanensis* (Jacquin) of Venezuela, Guiana, etc., but lower throat more extensively denuded, and in life flesh red instead of black.

Range.—Brazil, from the Rio Purús eastward to the Rio Teodoro (so far as known).

Remarks.—Our Rio Purús example agrees best with the greener of our two specimens of *cumanensis* from the Rio Caura, Venezuela, except for having the white spots on the breast reduced to mere traces, and for the bare skin of the lower throat, which in the dried state is pale instead of black, and much more bare of feathers. The collector's notes give it as follows: "chin cobalt blue; throat dark indigo, the bare area lower down flesh red." Mrs. Naumburg (Bulletin American Museum of Natural History, LX, 1930, 65) lists a specimen from the Rio Roosevelt having the same characters, and this specimen has also been available for examination in this connection. It agrees with ours except for having the general sheen of the plumage more decidedly bluish (very dark), and the white streaks on the breast somewhat more in evidence (although still small). The white on the wings is the same, also the throat, and undoubtedly the two individuals represent one and the same form. In life typical *cumanensis* has the "chin and upper throat azure blue; colour darkening to slate-black at the lower part of bare neck and on wattle" (Cherrie). Even in the dried skins the difference is conspicuous, and now that a second specimen has turned up it will be well to give a name to the form which it represents, the range of which lies south of the Amazon, from (at least) the Rio Purús eastward to the Rio Teodoro.

It is a pleasure to name this well marked race in honor of Mrs. Elsie M. B. Naumburg, who was the first to point out its characters.